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SCIENTIFIC EDITORIAL

Emergency, cardiology and Jacques[☆]

Urgences, cardiologie et Jacques

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In this issue of *Archives of Cardiovascular Diseases*, an article from the Cardiology Department of Purpan Hospital in Toulouse shows the signature of Professor Jacques Puel. When vice-president of the French Society of Cardiology, Jacques created and led the Emergency Working Group, one of whose objectives was to create synergy between emergency doctors and cardiologists. Indeed, cardiology is increasingly present in the prehospital phase, but also in emergency care. France has always been extremely creative in this field, not only with the first observations of prehospital thrombolysis but also in randomized studies such as CAPTIM [1].

There are many registries in cardiology, including CRUSADE, GRACE and FAST-MI, but specific prehospitalization registries are rare. Jacques Puel was a major initiator of the cooperative database, which required several years of data collection before any studies were published.

The current study from the Midi-Pyrénées region sticks to the news presented by two major studies, CARESS-in-AMI and FINESSE, both of which were published in 2008. The aim of the first was to investigate the optimal management of patients after thrombolytic therapy [2]. Patients with ST-segment elevation myocardial infarction (STEMI) treated by thrombolysis and abciximab were randomized to either immediate transfer for percutaneous coronary intervention (PCI) or to standard medical therapy with transfer for rescue angioplasty, if necessary. CARESS demonstrated that immediate transfer for PCI improved outcome in high-risk patients with STEMI treated at a non-interventional centre with half-dose reteplase and abciximab. The FINESSE study hypothesized that PCI preceded by early treatment with abciximab plus half-dose reteplase (combination-facilitated PCI) or with abciximab alone (abciximab-facilitated PCI) would improve outcomes in patients with STEMI, compared with abciximab administered immediately before the procedure

[☆] Determinants and prognostic impact of compliance with guidelines in reperfusion therapy for ST-segment elevation myocardial infarction: Results from the ESTIM Midi-Pyrénées Area, Charpentier S, Sagnes-Raffy C, Cournot M, Cambou J.-P, Ducassé J.-L, Lauque D, Puel J, for the ESTIM Midi-Pyrénées Investigators, doi:10.1016/j.acvd.2009.02.011.

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(primary PCI) [3]. Neither facilitation of PCI with reteplase plus abciximab nor facilitation with abciximab alone significantly improved the clinical outcome compared with abciximab given at the time of PCI in patients with STEMI.

Jacques Puel's work in this issue appears complementary to the OPTIMAL study, which he published in *Heart* in 2008 [4]. The aim of the OPTIMAL study was to identify predictors of early TIMI 3 flow and patency of the infarct-related artery following prehospital thrombolysis in patients with STEMI, using data from a "real-world" population. The group described for the first time a flowchart to triage patients for emergency angiography. The flowchart is a simple tool based on clinical and electrocardiographic data.

The aim of the present study was to assess the impact of guidelines on "real-world" practice and to compare the results with those of large North American databases, and especially the American Heart Association "Get with the Guidelines" database with 254 participating sites. In the present study, prehospital guidelines were respected in 61.1% of patients. The authors identified several factors associated with non-compliance, the most common of which was old age, but this finding has been consistent across studies and such analyses are always very difficult. The second factor was the impact of an atypical electrocardiogram (ECG), defined as the presence of left bundle-branch block or electrocardiographic abnormalities on the 12-lead ECG, suggesting myocardial infarction in a right and posterior location. Sandrine Charpentier pointed out that recommendations were implemented in 64.5% of cases with a typical ECG and in only 38% of patients with an atypical ECG. Improvements might therefore come not only from changes in training, but also thanks to new tools such as

telemedicine. The third finding of the present paper was the role of time of symptom onset: compliance was better when the first symptoms occurred during the daytime (odds ratio 1.43, 95% confidence interval, 1.12–1.82).

On top of being a brilliant clinician and scientist, Jacques Puel was a remarkable orator and storyteller, and he often spoke of "*Madame La Sécurité Sociale*" or "*Madame la Haute Autorité de Santé*", who offers or requests. However, improvements in clinical practice will always result principally from the work of clinicians and, in the present case, from developing synergy between specialties. Thus, the work initiated by Jacques and the French Society of Cardiology should continue...

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